

**Appendix Table 5-52****S&E articles in other life sciences, by coauthorship attribute and selected region/country/economy: 2000–13**

Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
World																
Total articles	11,491	11,825	12,284	12,597	13,763	16,203	18,251	19,726	20,570	21,411	22,655	24,376	25,287	25,724		
with multiple institutions	4,168	4,209	4,388	6,410	7,591	9,082	10,860	11,899	12,378	12,202	12,560	14,218	15,144	15,679		
with domestic institutions only	11,101	11,343	11,714	11,786	12,734	14,902	16,683	17,768	18,349	18,927	19,988	21,399	22,110	22,102		
with international institutions	390	482	570	811	1,029	1,301	1,568	1,958	2,221	2,484	2,667	2,977	3,177	3,622		
Canada																
Total articles	542	627	752	823	848	1,046	1,130	1,230	1,313	1,473	1,418	1,485	1,582	1,700		
with multiple institutions	270	278	351	524	566	756	837	911	976	1,063	979	1,063	1,129	1,254		
with domestic institutions only	466	531	633	651	651	801	867	904	964	1,041	1,048	1,092	1,110	1,143		
with international institutions	76	96	119	172	197	245	263	326	349	432	370	393	472	557		
Mexico																
Total articles	64	80	90	113	78	71	123	236	124	170	135	176	144	187		
with multiple institutions	43	54	81	102	58	56	106	130	103	123	100	140	111	142		
with domestic institutions only	51	70	78	88	67	54	94	189	78	128	89	100	97	117		
with international institutions	13	10	12	25	11	17	29	47	46	42	46	76	47	70		



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
United States																	
Total articles	6,615	6,512	6,831	6,919	7,597	8,397	9,119	9,278	9,375	9,708	10,127	10,515	10,758	10,631			
with multiple institutions	2,457	2,347	2,274	3,420	4,178	4,784	5,670	5,781	5,766	5,451	5,247	5,755	6,163	6,310			
with domestic institutions only	6,381	6,240	6,531	6,487	7,051	7,728	8,350	8,350	8,343	8,497	8,915	9,190	9,406	9,072			
with international institutions	234	272	300	432	546	669	769	928	1,032	1,211	1,212	1,325	1,352	1,559			
Argentina																	
Total articles	7	3	9	6	8	14	4	16	20	22	29	39	30	25			
with multiple institutions	2	1	4	4	6	8	4	9	14	19	25	29	19	20			
with domestic institutions only	6	3	8	4	5	7	2	13	9	6	10	17	15	7			
with international institutions	1	0	1	2	3	7	2	3	11	16	19	22	15	18			
Brazil																	
Total articles	133	125	146	181	201	261	404	579	677	832	889	1,203	1,223	1,213			
with multiple institutions	14	15	17	51	71	91	255	442	496	585	703	904	929	909			
with domestic institutions only	130	119	138	168	192	236	353	514	599	754	798	1,069	1,118	1,087			
with international institutions	3	6	8	13	9	25	51	65	78	78	91	134	105	126			
Chile																	
Total articles	5	8	9	7	6	7	24	34	39	63	48	78	83	117			
with multiple institutions	2	4	8	3	2	6	20	18	28	39	27	50	49	83			



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
with domestic institutions only	5	4	4	5	5	3	11	28	24	41	37	55	60	68			
with international institutions	0	4	5	2	1	4	13	6	15	22	11	23	23	49			
Austria																	
Total articles	12	17	21	23	26	38	41	46	41	53	70	85	91	107			
with multiple institutions	7	3	10	15	18	26	26	31	26	38	52	55	77	82			
with domestic institutions only	7	14	18	16	13	23	22	20	21	26	35	45	30	37			
with international institutions	5	3	3	7	13	15	19	26	20	27	35	40	61	70			
Belgium																	
Total articles	43	45	65	84	90	123	133	169	173	199	233	283	292	323			
with multiple institutions	21	25	37	56	66	97	108	124	131	142	185	213	238	254			
with domestic institutions only	33	33	42	56	53	68	70	87	99	103	117	149	122	148			
with international institutions	10	12	23	28	37	55	63	82	74	96	116	134	170	175			
Czech Republic																	
Total articles	5	4	11	5	11	32	28	22	28	31	42	57	46	59			
with multiple institutions	1	0	3	3	7	20	14	15	13	22	23	36	27	39			
with domestic institutions only	4	4	9	3	8	19	21	9	19	17	22	31	26	34			
with international institutions	1	0	2	2	3	13	7	13	9	14	20	26	20	25			



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
Denmark																	
Total articles	19	29	34	38	47	79	74	94	94	134	120	164	203	222			
with multiple institutions	6	20	16	25	35	55	50	74	72	102	99	132	174	184			
with domestic institutions only	17	18	25	22	30	60	48	50	62	73	69	88	103	117			
with international institutions	2	11	9	16	17	19	26	44	32	61	51	76	100	105			
Finland																	
Total articles	100	99	109	124	121	120	140	176	166	200	182	212	213	245			
with multiple institutions	60	65	72	105	106	88	118	146	137	164	143	167	180	193			
with domestic institutions only	87	83	92	84	93	87	97	110	118	128	105	130	120	142			
with international institutions	13	16	17	40	28	33	43	66	48	72	77	82	93	103			
France																	
Total articles	155	189	195	250	248	372	599	651	674	655	728	766	794	840			
with multiple institutions	46	31	51	96	88	142	248	234	272	253	283	331	367	376			
with domestic institutions only	135	179	166	218	209	307	493	542	542	542	614	627	630	651			
with international institutions	20	10	29	32	39	65	106	109	132	113	114	139	164	189			
Germany																	
Total articles	158	222	254	268	338	487	440	505	577	555	589	700	646	691			
with multiple institutions	47	62	90	135	186	265	266	285	351	349	366	444	407	469			



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
with domestic institutions only	133	192	197	210	266	374	318	364	398	347	365	432	404	393			
with international institutions	25	30	57	58	72	113	122	141	179	208	224	268	242	298			
Greece																	
Total articles	12	25	27	38	39	63	77	68	87	90	112	150	140	139			
with multiple institutions	9	15	12	24	29	45	53	44	63	66	86	121	103	105			
with domestic institutions only	6	17	22	25	25	47	44	40	61	57	81	96	96	87			
with international institutions	6	8	5	13	14	16	33	28	26	33	31	54	44	52			
Hungary																	
Total articles	25	4	6	9	11	15	15	22	17	19	22	27	31	27			
with multiple institutions	6	3	4	6	10	10	11	13	13	13	12	22	29	20			
with domestic institutions only	22	2	4	4	4	9	6	13	9	10	15	16	14	11			
with international institutions	3	2	2	5	7	6	9	9	8	9	7	11	17	16			
Ireland																	
Total articles	46	40	54	48	97	120	147	195	193	248	218	232	267	259			
with multiple institutions	32	25	25	24	55	87	91	120	117	137	124	157	189	174			
with domestic institutions only	32	23	40	39	64	77	102	134	137	176	156	157	161	159			
with international institutions	14	17	14	9	33	43	45	61	56	72	62	75	106	100			



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
Italy																	
Total articles	61	87	82	89	114	175	201	248	298	365	315	432	378	456			
with multiple institutions	29	47	35	54	80	123	148	173	216	268	241	310	294	350			
with domestic institutions only	49	66	65	75	79	126	124	173	212	253	205	286	242	274			
with international institutions	12	21	17	14	35	49	77	75	86	112	110	146	136	182			
Netherlands																	
Total articles	158	180	192	222	236	339	379	443	448	614	655	706	658	736			
with multiple institutions	89	93	112	162	188	251	291	370	362	494	528	581	536	611			
with domestic institutions only	133	133	141	152	163	248	253	284	294	373	409	430	375	430			
with international institutions	25	47	51	70	73	91	126	159	154	241	246	276	283	306			
Poland																	
Total articles	5	8	11	9	18	20	22	31	28	36	30	34	53	57			
with multiple institutions	3	5	4	8	18	13	16	23	16	21	23	21	40	49			
with domestic institutions only	3	7	9	5	14	13	10	15	18	23	14	21	29	33			
with international institutions	2	1	2	4	4	7	12	16	10	13	16	13	24	24			
Portugal																	
Total articles	5	6	6	14	7	40	22	42	50	58	70	110	112	157			
with multiple institutions	3	3	3	10	4	27	16	37	41	39	56	89	96	128			

Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
with domestic institutions only	3	4	4	8	3	18	15	18	33	37	41	55	51	83		
with international institutions	2	2	2	6	4	22	7	24	17	21	29	55	61	74		
Romania																
Total articles	1	0	10	7	2	2	7	41	34	61	59	51	58	100		
with multiple institutions	0	0	7	3	2	2	3	13	16	32	33	34	23	45		
with domestic institutions only	1	0	6	6	0	1	4	35	30	55	52	39	53	85		
with international institutions	0	0	4	1	2	1	3	6	4	6	7	12	5	15		
Spain																
Total articles	112	138	138	139	127	289	315	350	370	405	454	527	619	659		
with multiple institutions	24	51	46	99	94	179	234	262	268	251	285	357	441	453		
with domestic institutions only	100	122	118	97	106	231	265	270	288	307	340	387	467	475		
with international institutions	12	16	20	42	21	58	50	80	82	98	114	140	152	184		
Sweden																
Total articles	256	300	296	353	366	399	464	571	518	590	627	660	677	782		
with multiple institutions	156	177	194	265	283	300	372	468	425	466	512	531	537	642		
with domestic institutions only	221	254	248	282	294	314	361	406	369	406	393	420	432	483		
with international institutions	35	46	48	71	72	85	103	165	149	184	234	240	245	299		



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
United Kingdom																	
Total articles	2,025	2,056	1,886	1,875	1,817	2,205	2,626	2,874	2,848	2,833	2,900	3,120	3,217	3,445			
with multiple institutions	710	705	755	987	1,096	1,285	1,386	1,614	1,578	1,505	1,597	1,802	1,838	2,049			
with domestic institutions only	1,914	1,916	1,727	1,636	1,508	1,823	2,202	2,385	2,305	2,219	2,210	2,372	2,434	2,513			
with international institutions	111	140	159	239	309	382	424	489	543	614	690	748	783	932			
Norway																	
Total articles	48	57	75	102	105	125	125	164	261	226	293	315	360	388			
with multiple institutions	24	33	47	68	82	102	106	136	210	191	234	254	283	323			
with domestic institutions only	39	39	57	74	70	76	72	78	156	114	160	165	204	192			
with international institutions	9	18	18	28	35	49	53	86	105	112	133	150	156	196			
Russia																	
Total articles	5	2	6	10	7	18	10	17	12	13	9	18	12	16			
with multiple institutions	4	1	4	9	6	9	8	13	11	12	7	13	8	13			
with domestic institutions only	2	1	3	4	1	12	2	5	2	1	2	7	5	6			
with international institutions	3	1	3	6	6	6	8	12	10	12	7	11	7	10			
Switzerland																	
Total articles	56	45	50	83	103	130	171	158	171	194	206	245	270	287			
with multiple institutions	32	25	28	63	69	97	128	115	122	136	155	199	207	231			



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
with domestic institutions only	33	27	29	43	46	59	78	67	81	83	90	99	103	110		
with international institutions	23	18	21	40	57	71	93	91	90	111	116	146	167	177		
Iran																
Total articles	2	2	7	9	18	15	36	55	69	94	88	154	201	179		
with multiple institutions	1	1	3	5	14	10	25	39	60	72	69	128	157	154		
with domestic institutions only	2	1	6	5	11	12	25	36	43	70	57	116	169	126		
with international institutions	0	1	1	4	7	3	11	19	26	24	31	38	32	53		
Israel																
Total articles	74	74	88	94	97	102	110	141	134	169	166	193	178	195		
with multiple institutions	30	37	40	58	75	77	86	109	97	117	106	135	123	138		
with domestic institutions only	64	64	76	77	80	85	81	99	105	131	126	137	133	143		
with international institutions	10	10	12	17	17	17	29	42	29	38	40	56	45	52		
Saudi Arabia																
Total articles	6	2	2	1	4	4	10	7	20	15	18	24	44	48		
with multiple institutions	1	0	2	1	4	3	8	6	12	8	10	18	33	38		
with domestic institutions only	5	2	1	0	1	1	4	3	10	8	10	8	18	14		
with international institutions	1	0	1	1	3	3	6	4	10	7	8	16	26	34		



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
Turkey																	
Total articles	25	29	25	53	75	89	109	140	153	178	241	182	248	216			
with multiple institutions	10	12	13	33	58	61	77	107	110	127	160	121	166	159			
with domestic institutions only	20	25	21	47	71	77	94	127	136	158	213	159	212	179			
with international institutions	5	4	4	6	4	12	15	13	17	20	28	23	36	37			
Egypt																	
Total articles	3	1	1	4	7	4	4	11	15	21	25	30	36	19			
with multiple institutions	2	1	1	4	7	4	4	10	14	19	17	24	25	14			
with domestic institutions only	2	1	0	1	1	1	1	4	5	6	10	15	17	12			
with international institutions	1	0	1	3	6	3	3	7	10	15	15	15	19	7			
South Africa																	
Total articles	19	32	49	75	63	92	102	137	158	220	224	279	244	283			
with multiple institutions	13	16	14	25	34	57	57	77	84	131	125	147	130	144			
with domestic institutions only	13	26	41	60	43	61	66	85	103	132	136	188	165	183			
with international institutions	6	6	8	15	20	31	36	52	55	88	88	91	79	100			
China																	
Total articles	75	121	159	144	315	293	295	377	553	375	521	462	652	555			
with multiple institutions	31	48	69	79	143	148	181	265	405	247	335	352	450	416			



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
with domestic institutions only	62	101	133	102	232	219	206	229	290	238	341	258	424	328		
with international institutions	13	20	26	42	83	74	89	148	263	137	180	204	228	227		
India																
Total articles	21	18	19	34	40	66	82	105	129	112	126	162	223	215		
with multiple institutions	7	9	4	25	22	44	50	77	86	72	73	102	140	124		
with domestic institutions only	18	13	18	15	31	46	58	65	86	81	87	100	146	157		
with international institutions	3	5	1	19	9	20	24	40	43	31	39	62	77	58		
Japan																
Total articles	119	95	106	138	164	298	312	324	396	345	404	434	414	401		
with multiple institutions	39	47	72	92	113	165	197	220	266	221	258	295	290	290		
with domestic institutions only	101	78	82	109	120	242	249	253	322	270	311	349	298	309		
with international institutions	18	17	24	29	44	56	63	71	74	75	93	85	116	92		
Malaysia																
Total articles	3	5	2	1	4	8	10	9	17	22	33	40	63	62		
with multiple institutions	2	3	0	1	3	5	7	7	10	17	23	30	54	51		
with domestic institutions only	2	4	2	1	3	6	6	3	10	12	22	26	31	33		
with international institutions	1	1	0	0	1	2	4	6	7	10	11	14	32	29		



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
Singapore																	
Total articles	9	11	16	17	20	28	35	63	72	60	115	111	158	155			
with multiple institutions	5	6	8	13	15	17	23	38	51	42	85	79	114	103			
with domestic institutions only	8	8	14	14	13	19	20	43	37	27	38	49	71	70			
with international institutions	1	3	2	3	7	9	15	20	35	33	77	62	87	85			
South Korea																	
Total articles	30	37	33	67	194	225	210	243	314	268	294	302	317	398			
with multiple institutions	21	33	23	49	48	63	70	99	183	190	215	226	228	309			
with domestic institutions only	18	21	18	43	163	193	166	190	239	202	214	220	241	305			
with international institutions	12	16	15	24	31	32	44	53	75	66	80	82	76	93			
Taiwan																	
Total articles	77	56	81	73	122	168	222	318	383	456	547	571	596	509			
with multiple institutions	18	41	57	60	86	126	187	268	315	379	450	469	511	427			
with domestic institutions only	65	33	57	44	90	121	176	204	192	336	412	463	476	408			
with international institutions	12	23	24	29	32	47	46	114	191	120	135	108	120	101			
Australia																	
Total articles	569	685	683	740	801	897	1,151	1,244	1,402	1,375	1,556	1,606	1,731	1,864			
with multiple institutions	235	286	297	445	517	591	754	885	961	957	1,073	1,174	1,326	1,373			



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Region/country/economy and coauthorship attribute	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
with domestic institutions only	525	626	617	627	647	727	919	957	1,100	1,041	1,151	1,183	1,212	1,296		
with international institutions	44	59	66	113	154	170	232	287	302	334	405	423	519	568		
New Zealand																
Total articles	82	99	94	87	113	129	146	168	177	198	195	242	272	291		
with multiple institutions	27	38	31	55	65	79	94	98	98	137	125	155	186	210		
with domestic institutions only	73	86	78	62	74	100	97	117	130	106	117	148	160	138		
with international institutions	9	13	16	25	39	29	49	51	47	92	78	94	112	153		

**NOTES:** Article counts refer to publications from a selection of journals, books, and conference proceedings in S&E from Scopus. Articles are classified by their year of publication and are assigned to a region/country/economy on the basis of the institutional address(es) listed in the article. Articles are credited on a whole-count basis (i.e., each collaborating country/economy is credited with one count). Countries/economies with less than 1% of internationally coauthored articles in 2013 are omitted. Articles with multiple institutions are counts of articles with two or more institutional addresses. Articles with domestic institutions only are counts of articles with one or more institutional addresses all within a single country/economy. Articles with international institutions are counts of articles with institutional addresses from more than one country/economy.

**SOURCES:** National Science Foundation, National Center for Science and Engineering Statistics; SRI International; Science-Metrix; Elsevier, Scopus abstract and citation database ([www.scopus.com](http://www.scopus.com)).

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